

Notice of Allowability	Application No.	Applicant(s)	
	09/523,313	ROSE, TONY GERARD	
	Examiner	Art Unit	
	Marc R. Filipczyk	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE of 7/11/05.
2. ☒ The allowed claim(s) is/are 49-54, 68-83, 87 and 91-95.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>7/11/05</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

AT

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DETAILED ACTION

This Action is responsive to Applicant's RCE request and amendment filed on July 11, 2005.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 11, 2005 has been entered.

Claims 49-54, 68-83, 87, 88, and 91-95 are presented for examination.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Miscellaneous

Examiner confirms that Ikeda (U.S. 6,564,206) is not prior art.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael K. O'Neill on September 19, 2005.

AMENDMENT TO CLAIMS

49. (Currently Amended) Data display apparatus for displaying relationships between data sets in a group of data sets resulting from a query, the apparatus comprising:

selecting means for selecting a target data set from the group of data sets

obtaining means for obtaining similarities between pairs of unselected ones of the data sets in the group of data sets; and

display control means for controlling positions for display of representations of the unselected data sets on a display screen, wherein the representations of the unselected data sets are positioned around a representation of the target data set on the screen based on similarity to the target data set, and wherein the representations of the unselected data sets are spaced in visual proximity to each other based on the similarities between the pairs of unselected data sets.

52. (Currently Amended) A data display method of displaying relationships between data sets in a group of data sets resulting from a query, said method comprising the steps of:

accepting a selection of a target data set from the group of data sets;

obtaining similarities between pairs of unselected ones of the data sets in the group of data sets; and

controlling positions for display of representations of the unselected data sets on a display screen, wherein the representations of the unselected data sets are positioned around a

representation of the target data set on the screen based on similarity to the target data set, and wherein the representations of the unselected data sets are spaced in visual proximity to each other based on the similarities between the pairs of unselected data sets.

73. (Currently Amended) Apparatus according to claim 68, wherein said display control means is adapted to select a representation of the data set determined to be ~~the~~ most similar to the input query as a focal representation, and to control the display means to display representations of at least some others of the group of data sets around the focal representation at distances dependent upon the determined similarities.

80. (Currently Amended) A method according to claim 79, wherein a meaning of the input query is compared with a meaning of the caption data in said performing step.

88. (Cancelled)

91. (Currently Amended) Data display apparatus for displaying relationships between a group of data sets, the apparatus comprising:

selecting means for selecting a target data set from the group of data sets;

determining means for determining a similarity between each of the other data sets in the group and the target data set;

display control means for controlling display means to cause a display screen to display representations of the target data set and at least some of the other data sets in the group;

and relative location determining means for determining the relative locations on the display screen of each of second representations representing the at least some of the data sets and a first representation representing the target data set, the relative location determining means being operable, for each of the second representations, to control an x coordinate and a y coordinate of the relative location of the second representation on the display screen in accordance with the similarity between the data set represented by that second representation and the target data set so as to produce on the display screen a two-dimensional arrangement, wherein in the two-dimensional arrangement with the second representations are positioned relative to each other based on similarity between the data sets represented by the second representations and are positioned around the first representation with the x and y coordinates of the relative location of each second representation being determined by the similarity between the data set represented by that second representation and the target data set.

93. (Currently Amended) A data display method of displaying relationships between a group of data sets, said method comprising the steps of:

selecting a target data set from the group of data sets;

determining a similarity between each of the other data sets in the group and the target data set;

controlling display means to cause a display screen to display representations of the target data set and at least some of the other data sets in the group;

and determining the relative locations on the display screen of second representations representing the at least some of the data sets and a first representation representing the target

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data set by, for each of the second representations, controlling an x coordinate and a y coordinate of the relative location of the second representation on the display screen in accordance with the similarity between the data set represented by that second representation and the target data set so as to produce on the display screen a two-dimensional arrangement, wherein in the two-dimensional arrangement with the second representations are positioned relative to each other based on similarity between the data sets represented by the second representations and are positioned around the first representation with the x and y coordinates of the relative location of each second representation being determined by the similarity between the data set represented by that second representation and the target data set.

Allowable Subject Matter

Claims 49-54, 68-83, 87 and 91-95 are allowable over the prior art of record, renumbered as claims 1-28, respectively.

The following is an Examiner's statement of reasons for allowance:

Claims 49 and 52 are allowable because the prior art of record or that encountered in searching for the invention, fails to disclose or suggest display control means for displaying relationships between data sets resulting from a query by controlling positions for display of representations of unselected data sets, wherein the representations of the unselected data sets are positioned around a representation of a target data set (selected data set) based on the similarity to the target data set, and wherein the representations of the unselected data sets are spaced in visual proximity to each other based on the similarities between pairs of unselected data sets, as claimed in addition to the other claim provisions.

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Claims 91 and 93 are allowable because the prior art of record or that encountered in searching for the invention, fails to disclose or suggest displaying relationships between a group of data sets, and a relative location determining means for determining the relative locations on a display screen of each of second representations representing at least some of the data sets and a first representation representing a target data set, the relative location determining means being operable, for each of the second representations, to control x and y coordinates of the relative location of the second representation in accordance with the similarity between the data set represented by that second representation and the target data set so as to produce on the display screen a two-dimensional arrangement, wherein in the two-dimensional arrangement the second representations are positioned relative to each other based on similarity between the data sets represented by the second representations and are positioned around the first representation with the x and y coordinates of the relative location of each second representation being determined by the similarity between the data set represented by that second representation and the target data set, as claimed in addition to the other claim provisions.

Regarding claims 50, 51, 53, 54, 68-83, 87, 92, 94 and 95 depend from claims 49, 52, 91 and 93 respectively, and are therefore allowable for the same reasons.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art shows the state of art with respect to display systems.

U.S. Patent No. 6,628,313 of Minakuchi et al.

U.S. Patent No. 6,721,733 of Lipson et al.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MF
September 21, 2005


FRANTZ GOOBY
PRIMARY EXAMINER